

Abstract

ROUTING IN A DATA COMMUNICATION NETWORK

5 A method of supporting mobility (400, 500) in an Internet
Protocol (IP)-based data network. The method comprises
the steps of generating a first stateful IP
autoconfiguration message at a mobile node, whereby the
message includes an address capable of use for routing
10 maintenance. The mobile node transmits, the generated
message to a first access node (240), which incorporates
its address and forwards the message to a dynamic host
configuration protocol (DHCP) Server. The DHCP Server
(320) and access node (240) analyse the message to
15 determine a route to deliver data to and/or from the
mobile node. One or more route update message are
triggered from said access node and said DHCP server to a
number of network elements (230) between said access node
and said DHCP server in the IP based data network to
20 support mobility in an IP domain with minimum bandwidth
use and minimum tunnelling required. A DHCP Server (320)
and an access node (250) such as a DHCP Relay are also
described.

25 In this manner, the inherent configuration flexibility of
stateful autoconfiguration addresses is provided, in
contrast to, say, other micro-mobility management schemes
where the IP address is manually configured.

30 {FIG. 2 to accompany abstract}